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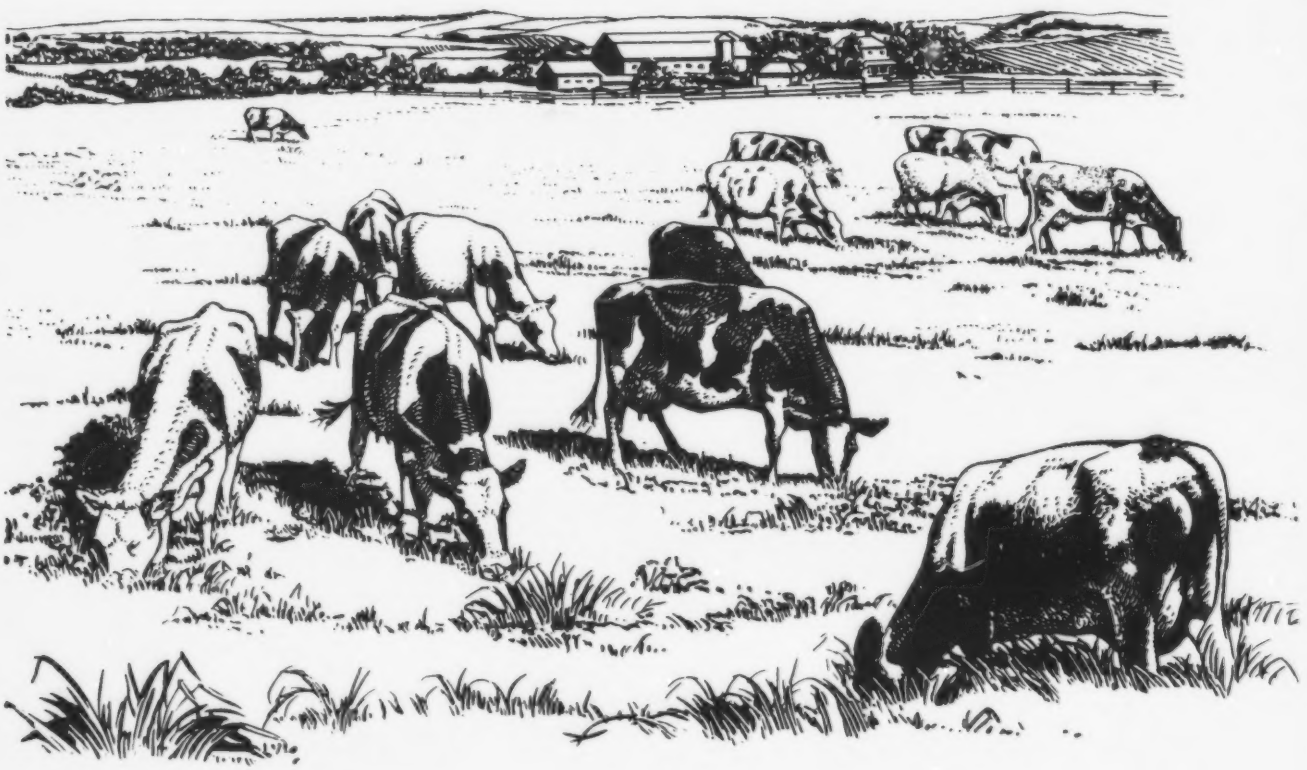
Dairy Farms
Five Year Summary

1984 - 1988



1984-1988

NOVA SCOTIA DAIRY FARM

BUSINESS SUMMARY REPORT

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FOREWORD

This report provides a summary of the business performance of Nova Scotia dairy farms over a five year period, 1984-1988 inclusive. Data used in the preparation of this summary was obtained from the Nova Scotia Dairy Farm Business Summaries prepared in each of the five years included in this report.

As noted in the Dairy Farm Business Summaries, the farms used were not selected on a random sample basis, but rather volunteered their information. Hence, care should be exercised in the interpretation and use of the results shown in this summary.

The main purpose of this summary is to provide basic information on the dairy industry, at the farm level, in Nova Scotia over a five year period. Trends in incomes, costs, net returns, efficiency and management factors are outlined.

The co-operation of the dairy producers whose business information has been used to prepare this summary is gratefully acknowledged. Thanks are also extended to Tracey Veno, who did the typing for this report.

The authors accept full responsibility for any errors which may appear in the final report.

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SECTION A

SUMMARY

SUMMARY

This report provides information on trends that have occurred at the farm level in the Dairy Industry over the five year period, 1984-1988 inclusive. As noted earlier, the farms used to provide the basic data were not selected on a random sample basis. However, even with this noted limitation, the information contained in this summary can be used with care to provide useful trend data regarding the dairy industry in Nova Scotia.

The material is presented in the following manner - a brief summary of ratios, cost and return data, and management factors on a per farm, per cow and per hectolitre basis. The format used for presentation of information is similar to that used in the annual Dairy Farm Business Summaries.

In reviewing information contained in Table A-1, a number of observations can be made. Gross Farm Income has increased in each of the five years with an overall increase of some 17 percent over the five year period. At the same time, costs have increased 10 percent over this period. Net Farm Income has increased by 78 percent over the five year period.

Production per cow has shown an increase over the five years, with the change over the period being 9.4 percent. Milk sold per man equivalent has increased by 10.1 percent over the period, with a slight decrease occurring in the last year.

In terms of prices received from milk, this figure has also changed over the period, from an average price of $47.41 per hectolitre in 1984 to $53.99 in 1988. This represents an increase, in percentage terms, of 14 percent. While returns have been increasing, costs have been on the rise as well. The cost of producing a hectolitre of milk averaged $48.98 in 1984, while in 1988 this figure was $53.53 - for a percentage change of 9 percent. The net return to the farmer was positive again in 1988 - that is, the gross return was greater than the cost. In 1988, the net return was $0.46 per hectolitre.

The largest individual component of cost in producing milk is purchased dairy ration. On a per cow basis, this expense has increased from $770 in 1984 to $776 in 1988, for a change of slightly less than 1 percent. On a per hectolitre of milk sold basis, the cost of feed decreased by $1.07 from $13.59 in 1984 to $12.52 in 1988.

Investment per cow has increased gradually over the period, with the increase over the five year period being 37 percent.

Return to total invested capital improved during the four year period, 1984-1987, going from 7.5 percent in 1984 to 11.5 percent in 1987. In 1988, it decreased slightly to 9.8 percent.

Capital turnover has remained relatively steady over the five year period, ranging from 1.5 in 1984 to 1.7 in 1988.

TABLE A-1: SUMMARY

ITEM	1984	1985	1986	1987	1988
Gross Farm Income	205786	213631	225127	239440	240313
Total Farm Expenses	184025	186869	189725	196115	201614
Net Farm Income	21761	26762	35403	43325	38699
Labor & Management Income	9548	14002	18306	25505	19156
# of Cows/Farm	64	64	64	63	61
Production/Cow (L)	5667	5640	5807	6127	6200
Cows/Man Equivalent	23	23	25	24	23
Milk Sold/Man Equiv. (HL)	1304	1274	1442	1442	1436
Receipts From Milk/HL	47.41	49.83	51.59	53.54	53.99
Cost of Producing Milk/HL	48.98	50.32	51.10	51.39	53.53
Net Return/HL	-1.58	-0.49	0.50	2.15	0.46
Variable Cost as % of Total Cost	67	67	64	62	61
Fixed Cost as % of Total Cost	20	20	21	23	24
Opportunity Cost as % of Total Cost	13	13	15	15	16
Purchased Feed/Cow ($)	770	760	764	711	776
Feed Cost/HL Milk ($)	13.59	13.48	13.16	11.60	12.52
Feed Cost as % of Milk Sold (%)	28.7	27.1	25.5	21.7	23.2
Investment/Cow ($)	4779	4920	5449	5902	6545
Return on Investment (%)	7.5	8.7	9.8	11.5	9.8
Capital Turnover (Yrs)	1.5	1.5	1.6	1.6	1.7

SECTION B

PER FARM ANALYSIS

INCOME

Total farm receipts increased from an average of $203,179. in 1984 to $241,059. in 1987 and then decreased in 1988 to $238,220. for an overall increase of 17 percent over the five year period.

Income from milk and milk subsidies accounted for 86 percent of Total Farm Receipts in 1988, up marginally from 85 percent in 1984.

TABLE B-1: INCOME

ITEM	1984	1985	1986	1987	1988
Milk Sales	164837	173997	186722	199573	197026
Milk Subsidy	7190	6503	6649	7293	7058
Livestock Sales	14140	15266	15193	18181	19602
Crop Sales	2808	2935	1905	2196	2645
Miscellaneous	14205	12028	11786	13816	11889
TOTAL FARM RECEIPTS	203179	210728	221624	241059	238220

EXPENSES

Expenses on a per farm basis increased from an average of $163,372. in 1984 to $174,337. in 1988. This represents a change of some 6.7 percent in Cash Expenses. Purchased dairy feed, the largest single cost item accounted for 27 percent of Cash Expenses in 1988.

TABLE B-2: EXPENSES

ITEM	1984	1985	1986	1987	1988
Dairy Feed	49299	48840	49169	44818	47323
Livestock Purchased	4713	4858	4150	3722	4122
Milk Hauling	6127	6069	6697	7191	7153
Crop Expenses	11765	11428	11160	12361	12986
Tractor & Machinery	11351	12541	11356	12356	11339
Truck & Auto	3116	3276	2728	2911	3890
Interest	16799	17059	17861	19046	20431
Labor	16304	17648	17019	18907	20299
Taxes & Insurance	3880	3903	4559	4673	4747
Milk Marketing Costs	10274	10049	11742	12545	9200
Dairy Supplies	4089	4187	4793	5000	5550
Vet & Drugs	2026	2136	2201	2499	2876
Breeding	2152	2432	2507	2521	2619
Building & Fence Repairs	4079	4034	4181	4149	5244
Utilities	5053	5506	4768	4663	4868
Custom Work }	-	-	-	4592	3710
Rentals & Leases } *	-	-	-	2548	2642
Miscellaneous }	12347	11509	11370	5894	5339
TOTAL CASH EXPENSES	163372	165476	166261	170898	174337

* Prior to 1987, custom work, as well as rentals & leases, were included in miscellaneous expense.

INCOME SUMMARY

In reviewing different levels of income, it was noted that despite overall increases over the five (5) year period, income at all levels decreased between 1987 and 1988. Net Cash Income has increased by 60 percent over the period from $39,807. in 1984 to $63,822. in 1988. Net Farm Income has also increased from $21,761. in 1984 to $38,699. in 1988, an increase of 78 percent.

Despite a decline between 1987 and 1988, Labor and Management Income has increased over the last five years, from $9,548. in 1984 to the 1988 value of $19,156.

TABLE B-3: INCOME SUMMARY

ITEM	1984	1985	1986	1987	1988
Total Farm Receipts	203179	210728	221624	241059	238220
Total Cash Expenses	163372	165476	166261	170898	174337
NET CASH INCOME	39807	45251	55363	70161	63882
Plus: Inventory Change	2606	2903	3503	-1619	2094
Less: Depreciation	20653	21393	23464	25217	27277
NET FARM INCOME	21761	26762	35403	43325	38699
Less: Value of Unpaid Family Labor	556	616	2493	2437	2556
Interest on Net Worth @ 10%	11657	12144	14604	15383	16988
LABOR & MANAGEMENT INCOME	9548	14002	18306	25505	19156

SECTION C

PER COW ANALYSIS

INCOME

When figures are calculated on a per cow basis, Total Farm Receipts have increased by 23 percent over the five (5) year period - from $3,173. in 1984 to $3,907. in 1988.

TABLE C-1: INCOME PER COW

ITEM	1984	1985	1986	1987	1988
Milk Sales	2575	2709	2893	3164	3231
Milk Subsidy	112	101	103	116	116
Livestock Sales	221	238	236	288	322
Crop Sales	44	46	30	35	43
Miscellaneous	222	187	183	219	195
TOTAL FARM RECEIPTS	3173	3281	3445	3822	3907

EXPENSES

Over the five (5) year period, Cash Expenses have increased from $2,552. per cow in 1984 to $2,860. in 1988 - a change of $308. per cow or some 12 percent.

TABLE C-2: EXPENSES PER COW

ITEM	1983	1984	1985	1986	1987
Dairy Feed	770	760	764	711	776
Livestock Purchased	74	76	65	59	68
Milk Hauling	96	94	104	114	117
Crop Expenses	184	178	173	196	213
Tractor & Machinery	177	195	177	196	186
Truck & Auto	49	51	42	46	64
Interest	262	266	278	302	335
Labor	255	275	265	300	333
Taxes & Insurance	60	61	71	74	78
Milk Marketing Costs	160	156	183	199	151
Dairy Supplies	64	65	75	79	91
Vet & Drugs	32	33	34	40	47
Breeding	34	38	39	40	43
Building & Fence Repairs	64	63	65	74	86
Utilities	79	86	74	74	80
Custom Work }	-	-	-	73	61
Rentals & Leases } *	-	-	-	40	43
Miscellaneous }	193	179	177	93	88
TOTAL CASH EXPENSES	2552	2576	2585	2710	2860

* Prior to 1987, custom work and rentals & leases were included with miscellaneous expenses.

INCOME SUMMARY

Net Cash Income per cow decreased between 1987 and 1988, however overall net cash income on a per cow basis has increased $427. or by 69 percent over the five year period. Net Farm Income had increased by $295. per cow between 1983 and 1987.

An increase in Labor and Management Income occurred over the five (5) year period. The 1988 per cow figure shows a decrease of 22 percent from the 1987 level, and an increase of 121 percent over the five year period.

TABLE C-3: INCOME SUMMARY PER COW

ITEM	1984	1985	1986	1987	1988
Total Farm Receipts	3173	3281	3445	3822	3907
Total Cash Expenses	2552	2576	2585	2710	2860
NET CASH INCOME	621	705	861	1113	1048
Plus: Inventory Change	41	45	54	-26	34
Less: Depreciation	323	333	365	400	447
NET FARM INCOME	340	417	550	687	635
Less: Value of Unpaid Family Labor	9	10	39	39	42
Interest on Net Worth @ 10%	182	189	227	244	279
LABOR & MANAGEMENT INCOME	142	218	285	404	314

SECTION D

PER 100 LITRES ANALYSIS

INCOME

Analysis of Total Farm Receipts on a per hectolitre of milk sold basis indicates that Farm Receipts have increased by $7.03 per hectolitre over the period. This translates to a change of 13 percent.

TABLE D-1: INCOME PER HECTOLITRE

ITEM	1984	1985	1986	1987	1988
Milk Sales	45.43	48.03	49.81	51.66	52.13
Milk Subsidy	1.98	1.80	1.78	1.89	1.87
Livestock Sales	3.90	4.21	4.07	4.71	5.19
Crop Sales	0.77	0.81	0.51	0.57	0.70
Miscellaneous	3.91	3.32	3.16	3.58	3.15
TOTAL FARM RECEIPTS	55.99	58.17	59.33	62.39	63.02

EXPENSES

Cash Expenses increased by $1.10 on a per hectolitre of milk sold basis over the five (5) year period. In percentage terms, this represents a change of approximately 2.5 percent.

TABLE D-2: EXPENSES PER HECTOLITRE

ITEM	1984	1985	1986	1987	1988
Dairy Feed	13.59	13.48	13.16	11.60	12.52
Livestock Purchased	1.30	1.34	1.11	0.96	1.09
Milk Hauling	1.69	1.68	1.79	1.86	1.89
Crop Expenses	3.24	3.15	2.99	3.20	3.44
Tractor & Machinery	3.13	3.46	3.04	3.20	3.00
Truck & Auto	0.86	0.90	0.73	0.75	1.03
Interest	4.63	4.71	4.78	4.93	5.41
Labor	4.49	4.87	4.56	4.89	5.37
Taxes & Insurance	1.07	1.08	1.22	1.21	1.26
Milk Marketing Costs	2.83	2.77	3.14	3.25	2.43
Dairy Supplies	1.13	1.16	1.28	1.29	1.47
Vet & Drugs	0.56	0.59	0.59	0.65	0.76
Breeding	0.59	0.67	0.67	0.65	0.69
Building & Fence Repairs	1.12	1.11	1.12	1.20	1.39
Utilities	1.39	1.52	1.28	1.21	1.29
Custom Work }	-	-	-	1.19	0.98
Rentals & Leases } *	-	-	-	0.66	0.70
Miscellaneous }	3.40	3.18	3.04	1.53	1.41
TOTAL CASH EXPENSES	45.02	45.68	44.51	44.23	46.12

* Prior to 1987 custom work and rentals & leases were included with miscellaneous expenses.

INCOME SUMMARY

An analysis of income on a per hectolitre of milk sold basis reveals Net Cash Income increased by $5.93 over the five (5) year period, despite a decrease of 7 percent over the previous two years. Similarly, Net Farm Income decreased 8 percent from 1987 to 1988, however overall, Net Farm Income increased $4.24 per hectolitre over the five year period.

Labor and Management Income shows an overall increase of $2.43 per hectolitre over the period.

TABLE D-3: INCOME SUMMARY PER HECTOLITRE

ITEM	1984	1985	1986	1987	1988
Total Farm Receipts	55.99	58.17	59.33	62.39	63.02
Total Cash Expenses	45.02	45.18	44.51	44.23	46.12
NET CASH INCOME	10.97	12.49	14.82	18.16	16.90
Plus: Inventory Change	0.72	0.80	0.94	-0.42	0.55
Less: Depreciation	5.69	5.91	6.28	6.53	-7.22
NET FARM INCOME	6.00	7.39	9.48	11.21	10.24
Less: Value of Unpaid Family Labor	0.15	0.17	0.67	0.63	0.68
Interest on Net Worth @ 10%	3.21	3.35	3.91	3.98	4.49
LABOR & MANAGEMENT INCOME	2.64	3.87	4.90	6.60	5.07